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September 10, 2007

VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Mary L. Cottrell, Secretary Massachusetts Department of Public Utilities One South Station, 2nd Floor Boston, MA 02110

RE: <u>Investigation by the Department of Public Utilities on its own Motion into Rate</u>

<u>Structures that will Promote Efficient Deployment of Demand Resources – </u>

D.P.U. 07-50

Dear Ms. Cottrell:

Enclosed for filing in the above referenced docket, please find the Comments of Bay State Gas Company's ("Bay State" or "Company") in response to the Order issued by the Department of Public Utilities ("Department") on June 22, 2007, and further revised on July 26, 2007.

In addition, I would like to request the following people be included on the Panel organized by the Department for the public hearings currently scheduled to take place during the period October 22-29, 2007:

Stephen H. Bryant, President Bay State Gas Company 300 Friberg Parkway Westborough, MA 01581 Phone: (508) 836-7267

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Joseph A. Ferro, Manager, Regulatory Policy Bay State Gas Company 300 Friberg Parkway Westborough, MA 01581

Phone: (508) 836-7273 Email: jferro@nisource.com Lawrence Kaufmann, Ph.D., Partner PACIFIC ECONOMICS GROUP 22 East Mifflin Street, Suite 302 Capitol Square Madison, Wisconsin 53703

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The following is a summary of Mr. Bryant, Mr. Ferro and Mr. Kaufmann's qualifications:

Mr. Bryant's Qualifications

Mr. Bryant, along with Danny G. Cote, the General Manager of Bay State, is responsible for ensuring that Bay State provides its customers with reliable, high-quality service at the lowest reasonable cost and also for ensuring the overall profitability of Bay State. In addition, Mr. Bryant oversees government policy initiatives, including Bay State's interaction with the Department. He also coordinates the regulatory and government policy issues of Bay State with Bay State's parent company, NiSource Inc.

Mr. Bryant joined Bay State in January of 2001, as Vice President of External Affairs, a position he held until he was appointed President of Bay State and Northern. Prior to joining Bay State, Mr. Bryant was Vice President of Marketing Services for Connecticut Natural Gas Corporation ("CNG) from 1997 through 2000. His responsibilities in that position included oversight of all regulatory matters before the Connecticut Department of Public Utility Control. Prior to joining CNG, he held several positions with Commonwealth Gas Company (now NSTAR Gas), including Vice President of Marketing and Customer Relations. He was employed by Commonwealth Gas or its affiliates from 1971 through 1997.

Mr. Bryant holds a Bachelor of Arts in Economics from the University of Massachusetts at Boston and a Masters in Business Administration from Boston University.

Mr. Ferro's Qualifications

Mr. Ferro provides regulatory management services for Bay State. In his current position as Manager, Regulatory Policy, Mr. Ferro's responsibilities include setting regulatory and pricing policy and carrying out associated initiatives. Mr. Ferro has previously been responsibilities for preparing and supporting Cost of Gas Adjustment ("CGA") filings, conducting analyses and forecasting of rates and revenues, supporting adjustments to test year costs as well as determining and sponsoring revenues and billing determinants in rate case filings. He has also directed the analysis and filing of rate design proposals, including unbundling initiatives, analyzing the feasibility and filing of special rate contracts, administering all rate tariffs, as well as providing competitive pricing assessments.

Mr. Ferro joined Bay State in 1977, and has held various positions in the Customer Relations area before joining the Rate Department in September 1980 as an Associate Rate Analyst. In February 1983, he was promoted to Rate Analyst. In August 1987, he was promoted to Senior Rate Analyst. On February 1, 1990, he was promoted to Manager, Gas Costing and Rate Analysis. During 1994, he was promoted to Manager, Rate Services, and on August 1, 1998, he was promoted to Director of Pricing Services. On August 16, 1999, he became Director, Revenue Development. At approximately the time of the consummation of the merger between NiSource Inc. ("NiSource") and Columbia Energy Group ("Columbia") (around November 1, 2000), he was assigned to his current position of Manager, Regulatory Policy.

Mr. Ferro graduated from the University of Massachusetts/Boston in 1974 with a Bachelor of Arts degree in Mathematics.

Mr. Kaufmann's Qualifications

Mr. Kaufmann is a Partner at Pacific Economics Group LLC ("PEG"). His work includes designing and providing empirical support on performance-based regulation ("PBR") plans for energy utility clients. His specific duties include designing regulatory plans that create strong performance incentives, supervising research on the productivity and input price trends of utility industries, benchmarking utility cost performance, and expert witness testimony.

Prior to co-founding the Madison office of PEG in 1998, Mr. Kaufmann was employed from 1993 until 1998 as a Senior Economist at Christiensen Associates, an economic consulting firm based in Madison. He received his PhD in Economics from the University of Wisconsin in 1993.

The following is a list of topics Mr. Bryant, Mr. Ferro and Mr. Kaufmann plan on addressing during the public hearing:

Mr. Bryant

- The Historical Period of Expanding Natural Gas Systems is Ending
- Natural Gas Industry Fundamentals are Shifting
- Bay State's Unique Position Regarding PBR, Decoupling and Infrastructure Replacement

Mr. Ferro

- Example Base Rate Adjustment Mechanism
- Full Cost-Based Distribution Rate Alternative

Mr. Kaufmann

- Relationship Between Incentive-Based Rate Plans and Decoupling Plans
- Overview of California's Experience with Incentive-Based Rate Plans and Decoupling Plans

Lastly, the following is a summary of the conclusions and opinions Mr. Bryant, Mr. Ferro and Mr. Kaufmann share on the above-proposed topics:

Since Bay State's last rate case was filed in 2005 (i.e., <u>Bay State Gas Company</u>, D.T.E. 05-27), the Company has experienced a significant reduction in average use per customer for its residential and small C&I customers. It has also invested significant capital into non-revenue producing plant, including the replacement of non-cathodically protected, non-coated steel pipe. Further, the Company's ability to add additional customers has been challenged by, among other things, higher construction costs and fewer cost-effective opportunities to connect new customers to the distribution system. As a result, Bay State has experienced a significant erosion in the Company's earnings, and has spent a significant amount of time and effort exploring the various regulatory alternatives it has available to addressing these important issues. Accordingly, the Company concludes that it has important, direct experience to share with the Department. Further, Mr. Kaufmann has significant experience dealing with PBR plans in Massachusetts, and can add an important perspective to this public policy discussion.

Bay State respectfully requests the opportunity to modify the above list of topics to the extent that other parties file comments that Bay State and / or Mr. Kaufmann would like to address during the public hearing.

Respectfully Submitted,

cc: Jeanne L. Voveris, Esq., Hearing Officer Jed Nosal, Esq., Office of Attorney General Sandra Callahan, Esq. Office of Attorney General Rachel Graham Evans, Esq., D.O.E.R. Service List (electronic service only)

¹ The Company notes that these factors have all occurred while Bay State has been operating under a 10-year PBR plan.

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

INVESTIGATION OF THE DEPARTMENT)
OF PUBLIC UTILITIES ON ITS OWN)
MOTION INTO RATE STRUCTURES THAT)
WILL PROMOTE EFFICIENT)
DEPLOYMENT OF DEMAND RESOURCES)

D.P.U. 07-50

INITIAL COMMENTS OF BAY STATE GAS COMPANY

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September 10, 2007

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COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

INVESTIGATION OF THE DEPARTMENT
OF PUBLIC UTILITIES ON ITS OWN
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D.P.U. 07-50

INITIAL COMMENTS OF BAY STATE GAS COMPANY

Bay State Gas Company ("Bay State" or the "Company") respectfully submits these initial comments to the Department of Public Utilities (the "Department") in response to its Notice of Investigation into rate structures that promote the efficient deployment of demand-side resources ("Ratemaking NOI"). In particular, the Department intends to modify its existing ratemaking practices to remove potential financial disincentives to the broader implementation of energy efficiency and conservation measures for customers of Massachusetts electric and natural gas utilities.

The Department's Ratemaking NOI raises important policy considerations with respect to the manner in which all electric and natural gas distribution utilities in the Commonwealth recover base distribution revenues from their customers. In particular, whether existing ratemaking practices create financial disincentives for utilities to promote demand-side efficiency resources, and what changes to the existing practices would better align the interests of customers and distribution utilities. These policy considerations are extremely relevant today as wholesale energy prices have increased dramatically and environmental concerns over carbon

emissions are receiving increased emphasis. The Department is appropriately considering important means of advancing the State's energy policy goals through a reexamination of basic ratemaking approaches.

I. EXECUTIVE SUMMARY OF BAY STATE COMMENTS

The Ratemaking NOI strikes at the heart of the most important issues facing natural gas local distribution companies ("LDCs") and their customers. Revenue declines resulting from dramatic downward trends in customer usage places Bay State in the unenviable position of having virtually no opportunity to achieve its authorized level of earnings. Bay State's current situation contradicts the Department's regulatory mandate to maintain the financial integrity of a utility operating in the best interests of its customers¹. To the contrary, the existing rate structure, which relies on throughput charges² to recover a significant portion of the Company's fixed costs, resulted in substantial revenue erosion as use-per-customer ("UPC") declined by approximately seven percent over a two-year period from 2004 through 2006. Experience indicates that UPC is unlikely to return to levels relied upon to set Bay State's current base rates, exposing Bay State to ongoing and persistent revenue deficiencies continuing beyond levels that it has already experienced over the last two years.

Natural gas distribution customers, for their part, experienced the negative impacts of a run-up in wholesale natural gas commodity prices in excess of 300 percent between 2000 and

See, e.g., Boston Gas, D.T.E. 05-66 (2005) wherein the Department reiterated the premise of <u>Bluefield</u> Water Works Improvement company v. Public Service Commission of West Virginia, 262 U.S. 679 (1922), and <u>Federal Power Commission v. Hope Natural Gas Company</u>; stating: "the Company is constitutionally guaranteed the opportunity, given efficient management, to recover costs reasonably and necessarily incurred to serve the customers it is obligated to serve so that it may maintain its financial integrity and attract capital."

Bay State's use of the term "throughput-based" or "throughput" charge refers to revenue recoveries from volumetric charges applied to the therms of gas sold or transported to customers. The term is synonymous with the Department's use of the term "energy charge" in the Ratemaking NOI.

2005. The price run-up, driven primarily by increased demand for natural gas to fire electric generation, contributed to substantial increases in the economic burden of meeting the essential needs of Bay State's customers including the cost to heat their homes. Such a dramatic price shift calls for greater emphasis on energy efficiency and other means of reducing the energy cost burden for customers. In addition, forecasts of natural gas prices remain at elevated levels and use of natural gas to meet growing electricity demands is expected to continue. As a result, recent trends in natural gas consumption by Bay State's customers are likely to continue.

Bay State strongly supports reduction in the energy burdens of its customers and aggressively pursues achievable energy savings and rapid deployment of new energy-saving technologies consistent with the requirements of the Department, sometimes at the expense of its concommittant obligation to shareholders. This is the quandary facing Bay State and many other LDCs throughout the United States, which the Company actively sought to address through various regulatory options filed with the Department or currently under evaluation by Bay State. The core issue is the need to align the interests of customers to lower their bills with the financial integrity of the LDC by severing the link between customer consumption and utility revenues.

Breaking this link is the fundamental approach reflected in the Ratemaking NOI. Bay State endorses the general principles of the modifications to the existing ratemaking practices outlined by the Department. Many of these principles guided regulators in other jurisdictions to approve similar ratemaking approaches that decouple utility revenues from throughput. The approaches in other jurisdictions offer important insights for the Department and all stakeholders to consider as new policies are adopted here³.

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Utility regulators in the states of Arkansas, California, Colorado, Indiana, Maryland, Missouri, New Jersey, North Carolina, Ohio, Oregon, Utah, and Washington have approved ratemaking mechanisms that sever the link between customer throughput and gas utility base revenue recoveries.

Bay State welcomes the opportunity to outline its recommendations for the Department in this important proceeding. Many are fully consistent with the straw proposal outlined by the Department, while others reflect modifications that Bay State believes are important to achieving the intended goals and benefits of aligning utility and customer interests with respect to energy efficiency and conservation. The primary recommendations of Bay State's comments are as follows:

- (1) **Broad changes are underway in the natural gas industry:** Significant increases in demand for natural gas in the electric generation sector have outpaced supply additions leading to high and volatile commodity prices. At the same time, the natural gas distribution industry has matured from prior periods of significant growth, entering a phase marked by replacing aging infrastructure to serve existing customers.
- (2) **Traditional throughput-based rate designs no longer reflect the current operating environment.** The majority of the Company's costs are fixed, while the majority of the Company's base revenue recoveries are through throughput charges that depend on customer usage. This rate design provides incentives for gas utilities to increase throughput, contrary to the needs of current customers and important public policy objectives. While a throughput-based rate design was appropriate for the historical period of low prices and high customer growth, such a rate structure places the interests of customers and gas utilities at odds with one another and should be supplanted.
- (3) Removing the link between throughput and margin recoveries will properly align the interests of gas utilities and their customers and lead to increased energy efficiency and conservation opportunities for customers: While Bay State participates in traditional efforts to provide energy efficiency and conservation opportunities to customers, complete removal of the existing link between throughput and margin will enable it to more aggressively and creatively encourage changes in customer behavior that lead to increased conservation⁴. Lower energy bills resulting from these efforts will contribute to a more satisfied and stable customer base.
- (4) The basic structure of the base rate adjustment mechanism recommended by the Department is workable: Through detailed comments on each element of the straw proposal, Bay State offers the Department some recommended changes that remain consistent with the overall objectives outlined by the Department.

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The Department provides Bay State with recovery of lost base revenues today; however, recovery is limited to revenue losses associated with measurable participation in approved energy savings programs.

- (5) The Department should not require base rate proceedings in order to initially implement decoupled rate structures: Mandatory rate cases are not a prerequisite to the implementation of decoupling, particularly for utilities that have recently completed a full rate review. Rate cases for all gas and electric utilities will drain scarce resources and lead to delayed implementation at a time when quick action will deliver greater benefits to customers.
- (6) The Department's existing use of incentive rate plans should continue with the implementation of base rate adjustment mechanisms: The incentive rate plans, including the ten-year plan approved by the Department for Bay State in D.T.E. 05-27, are directed at the efficient management of utilities and lead to the undertaking of significant risks to achieve opportunities not possible under traditional cost-plus rate structures. Failure to allow the incentive rate plans to continue would be unfair to utilities and undermine the benefits that have been achieved for customers. Decoupling is directed at the impact of changes in customer throughput and associated revenues, and is not only fully consistent with incentive ratemaking, but provides an appropriate and complementary element to incentive rates.

The implementation of a ratemaking adjustment similar to that outlined in Bay State's comments would achieve the Department's objective of aligning the interests of Bay State and customers and remove the existing disincentive for utilities to promote energy efficiency. Under such a realignment of existing ratemaking practices, Bay State would aggressively pursue beneficial savings opportunities for its customers. The resulting decline in energy costs would be substantial as the vast majority of total costs to consumers is comprised of gas costs that would be avoided with reduced consumption. These cost reductions benefit customers and improve Bay State's ability to continue to serve them into the future. Retaining customers is critical to the Company's ability to recover the costs of substantial current and future capital investments that are depreciated over many decades under the Department's ratemaking practices. In addition, the Department, Bay State and all stakeholders would no longer be concerned with the impact of year-to-year changes in UPC on earnings, focusing their energy instead on the common objectives of reducing the impact of energy use and lowering customer

bills. In order to further advance dialog on this important matter, Bay State prepared an example of how a base rate adjustment mechanism could operate based on UPC changes that occurred since 2004, the test period for establishing the Company's current base rates.

II. CHANGING CONDITIONS WARRANT A REEVALUATION OF THE EXISTING RATE DESIGN PARADIGM

Rate design and associated revenue recovery mechanisms are important tools relied upon by regulators and interested stakeholders to achieve policy objectives that vary over time. The energy industry continues to undergo rapid evolution in material respects, and regulated distribution utilities are certainly no exception. Bay State believes that the more recent industry changes contribute to heightened challenges for utilities and their customers that necessitate a reordering of public policy objectives and the specific role that utility rate design plays in meeting those objectives. Bay State's comments in this section focus on natural gas distribution service; however, many of the principles are the same for electric distribution service as well.

A. The Historical Period Characterized by an Expanding Natural Gas System is Coming to an End

The natural gas system underwent a period of broad expansion that lasted for decades following World War II. This expansion, enabled by advances in metallurgical technologies and welding techniques, brought the benefits of reliable, affordable and clean-burning natural gas to millions of households and business throughout the United States. Public policy promoted the expansion of natural gas infrastructure and additional penetration of natural gas into more homes and for additional end-uses.

The prevalent rate structure in place throughout this timeframe reflected the aforementioned policy objective of expanding the natural gas system. Virtually 100% of a gas

distribution company's costs of providing distribution service do not vary with the level of consumption by customers. Yet, gas utility rates typically recover a substantial proportion of utility revenue requirements through variable charges. Bay State is no exception to this general practice as nearly two-thirds of the Company's distribution service revenues are recovered through variable rate components. The form of rate design creates specific operating incentives for the utility and is a means of encouraging the utility to aid in the advancement of public policy objectives. The operating incentives stemming from traditional rate design approaches are the result of a dichotomy between a gas utility's cost structure and its revenue structure.

The inherent operating incentives under a rate structure that recovers fixed costs primarily through variable charges are for the gas utility to grow loads for existing and new customers. This is particularly relevant in the current environment where customer consumption is declining as existing appliance stocks are replaced with more efficient ones. Declining use by existing customers reduces distribution revenues, but does not lead to any reduction in associated distribution service costs⁵. While growing load through the addition of new customers is consistent with public policy favoring clean-burning natural gas, incentives to grow load by current customers is at odds with other public policy goals that favor reduced energy use.

Moreover, the dichotomy between a gas utility's fixed cost structure and its variable revenue stream means that a reasonable opportunity to earn its authorized rate of return is predicated on an operating environment generally characterized by stable levels of consumption by its firm customers. Such an approach naturally creates a disincentive for the utility to promote the adoption of energy efficiency measures and conservation by customers. The

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Incremental revenues associated with adding new customers to the distribution system are needed to cover the costs of the added customers and do not mitigate the financial impact of revenue losses associated with existing customers.

disincentive has been somewhat mitigated through various lost base revenue and performance incentives associated with utility-sponsored energy efficiency measures authorized by the Department. However, the underlying tension between the interests of the gas utility and its customers remains in full force given the targeted scope of the compensation provided under these mechanisms.

Gas utilities and regulators also historically employed frequent base rate cases as a preferred method of reflecting the impacts of rapid growth in utility revenue requirements. The updates included the costs of incremental rate base as well as any changes to customer consumption characteristics. The use of frequent rate cases diminished the disincentive for the adoption of energy efficiency and conservation as declining customer usage would be reflected in prices within a reasonable timeframe, thereby limiting the utility's exposure to revenue risks associated with declining use. However, the Department established a preference for longer-term rate plans during the mid-1990s as a means of encouraging gas and electric utilities to manage their cost increases and avoid more frequent rate cases.

B. Natural Gas Industry Fundamentals are Shifting Dramatically in Many Important Respects

A confluence of factors is bringing about substantial changes in the natural gas industry.

Among the factors are (i) the level and volatility of wholesale commodity prices, (ii) distribution utility financial drivers and (iii) heightened focus on environmental impacts of energy use. A greater understanding of each of the primary forces driving changes for gas utilities and their customers establishes the basis for reevaluation of the current rate design paradigm.

1. Natural Gas Commodity Prices

Natural gas plays an ever-important role in meeting United States economic and environmental goals. The favorable natural gas commodity pricing conditions that existed

throughout the 1990s and the desirable environmental attributes of this clean-burning fuel led to increased penetration in traditional residential and commercial and industrial ("C&I") markets and increased use of natural gas to fire electric generation. Nationwide, the increased penetration of natural gas in residential and C&I markets has been largely offset by declining average use brought about through increased appliance and boiler efficiency. However, the use of natural gas to generate electricity has grown dramatically, creating increased pressure on natural gas supplies.

Following the energy shortages experienced in the late 1970s, the United States Congress passed the Powerplant and Industrial Fuel Use Act that imposed restrictions on the construction of gas-fired power plants so that gas supplies would be available to meet essential needs customers. The ensuing supply surplus and environmental benefits of natural gas led Congress to repeal the Act in 1987, laying the groundwork for substantial growth in natural gas-fired electric generation.

Natural gas-fired electric generation has been viewed as attractive because of the relatively lower capital costs associated with new-generation technologies, shorter construction lead times, lower emissions and easier permitting processes relative to other fuels. As a result, more than 95% of the generating capacity built from 2000-2005 was gas-fired. 200,000 MW of additional natural gas-fired generating capacity was brought on-line in the United States in this period alone. This represents more than six times the installed generating capacity of all types serving customers in the ISO-New England regional transmission area. As a result, the electric generation market consumed 6.2 Tcf or 28 percent of total natural gas consumption in 2006, an increase of 68 percent over natural gas consumption by electric generators in 1980. With the continuation of government policies that favor the use of natural gas to meet growing electric

generation needs, the electric generation sector is expected to continue to be the primary driver of continued overall growth in natural gas demand, albeit at a slower rate.

Adequate resources exist to fuel the increasing domestic natural gas markets; however, productive capacity additions have lagged recent growth trends. Simply stated, available resources have not been developed. Gradual declining deliverability in the mature supply basin areas in the Gulf of Mexico and less than anticipated deliverability from the more recently commercialized Sable Island area mean that existing development of North American resources will not be able to keep up with the level of demand growth. Substantial new deliverability from new sources will be needed in addition to more conservation. Development of the Alaskan North Slope reserves and construction of the remaining portion of the Alaska Natural Gas Transmission System as well as increased imports of Liquefied Natural Gas ("LNG") would be sufficient to meet growing demands; however, the costs of developing these resources and the timing associated with bringing them to market are less favorable than traditional supplies. A significant market impediment is the important public policy gap that exists between favoring the use of natural gas as the fuel of choice and promoting the development of new natural gas supplies to meet market needs.

Policy makers have not addressed critical issues associated with obtaining new supplies that are needed to meet growing demand. Among these are the needs to resolve siting and environmental concerns associated with the pipeline facilities necessary to deliver Alaskan supplies to the lower 48 states. These politically charged issues must be resolved in order to attract the substantial capital investment needed to complete this critical project. Similarly, tapping the LNG import market requires the development of additional terminals to receive deliveries of LNG. Yet, substantial "not-in-my-backyard" political pressures must be resolved

through appropriate national policies before sufficient import capacity will be sited and constructed. The widely-recognized policy gap is contributing to an ongoing tight supply situation and further demonstrates the need to consider new methods of inducing conservation and energy efficiency as important alternatives to potential new supply resources.

The impact of tight supplies on natural gas markets is unfavorable and leads to greater volatility and higher prices as evidenced by recent experience. Specifically, small movements in demand or available capacity lead to significant movements in price when supplies are tight. The historical natural gas pricing environment characterized by low and stable prices is not expected to return as high and volatile prices will continue under forecast supply-demand fundamentals.

2. Gas Utility Financial Drivers

As the gas distribution industry changes from a period of significant growth to greater maturation, the important financial drivers of a gas utility's earnings also change. The use of frequent rate cases has been replaced in most jurisdictions by longer-term rate plans that are intended to replicate the benefits of competitive influences on the cost of operations. The incentive components of the longer-term plans are directed at achieving cost benefits; however, an outcome of the existence of longer-term rate plans is that updated customer consumption characteristics are not reflected in rates on a periodic basis as was the case with more frequent base rate cases. Failure to update the throughput or billing determinants underlying the LDC's rates creates the potential that the revenues are out-of-sync with the costs of providing service.

The maturation of the gas distribution industry is also creating a substantial shift with respect to capital expenditures. Whereas the majority of historical capital expenditures were associated with adding profitable new loads, substantial capital spending is now associated with

non-revenue producing projects. This is particularly true for Bay State, which is in the midst of a \$350 million program to replace bare steel distribution mains that currently form the core of its system, but are nearing the end of their useful lifespan. Further, the capital costs associated with adding customers are substantially higher due to (i) the lower number of new customers that are located on an existing distribution main, (ii) fewer residential non-heating to heating conversions, and (iii) the higher costs of installing mains and services.

Recently, customer usage characteristics for the residential and small volume C&I customer classes have swung dramatically, largely in response to higher prices. Gone are the days of relatively stable throughput and penetration of new burner-tips at existing locations. The associated throughput risks create uncertainty for gas utilities, which contrasts with the experience of many electric utilities that are continuing to grow average UPC with the penetration of new electric-driven technologies in homes and businesses.

The potentially negative shifts associated with changing economic drivers of gas distribution utility operations are magnified by changing weather patterns. In recent years, weather variations have grown, increasing the impacts of changing customer consumption patterns in individual years. While many jurisdictions have implemented weather stabilization mechanisms, the Department has not to date adopted this method of reducing the impact of wide fluctuations in weather.

3. Environmental Impacts of Energy Use

Environmental concerns associated with human activity are perhaps greater today than at any other time in history. Responsible energy consumption falls squarely under the rubric of important environmental challenges for today's society. There is an increasing focus on reducing carbon emissions and the associated negative impacts that result. While natural gas is

cleaner-burning than other fossil fuels, a smaller carbon footprint for gas end-uses is desirable. Further, potential climate risks including global warming as well as energy security concerns are gaining greater attention by environmental advocates and local and national policy makers.

The increased awareness of climate and other environmental concerns is leading to substantial research and development efforts to bring about promising new technologies that will greatly reduce energy consumption. Smart metering, renewable energy, and intelligent and more efficient appliances are among many technologies that are receiving significant attention. A number of new applications are expected to be commercialized over the next decade; however, many times newly commercialized technologies require some intervention to penetrate the market.

C. Changing Industry Fundamentals Contribute to Material Challenges for Consumers and Gas Utilities Alike

Natural gas consumers and gas distribution utilities are exposed to increasing challenges and risks due to the material changes associated with current industry trends. The potential for negative impacts are significant and should be addressed. At the same time, the potential opportunity created by new technologies could mitigate the negative impacts of these changes on consumers and benefit the environment.

The significant increases in wholesale natural gas prices have led to increased costs for Bay State's customers. Commodity natural gas costs are recovered on a pass-through basis via the Company's Cost of Gas Adjustment Clause ("CGAC"). The CGAC has risen by 200 percent from approximately \$3.50 in 1991⁶ to \$10.50 today⁷. The CGAC now comprises nearly three-

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The average annual cost of gas reflected in gas cost revenues filed in DPU 92-111.

The average annual cost of gas reflected in Bay State's revised 2007 Off-peak Period CGA filed in DTE-07-GAF-01.

fourths of customers' total bills for natural gas service. While prices have moderated somewhat over the past few months, the persistent supply-demand imbalance exposes natural gas markets to future rapid price fluctuations in response to only moderate changes in demand. The onset of a period of cold weather this winter, disruption of production as occurred in 2005 or a number of other events could easily send prices marching upward over the short term as reflected in current futures market prices. The increased volatility poses difficulties for customers to manage their energy costs as well.

The primary challenge for Bay State and other gas utilities is the substantial revenue risks associated with declining UPC. Existing rate design simply does not address the impact of fluctuations in customer usage on revenues. Bay State and many other gas distribution utilities are experiencing earnings erosion attributable to customers' natural response to changing markets due to the fact that costs do not decline along with consumption.

The Department should recognize that the primary drivers of market changes that are bearing down on gas utilities and their customers are attributable to circumstances that are beyond their ability to control or influence. Namely, the market impacts of a dramatic growth in the use of natural gas to generate electricity in the absence of regulatory and environmental policies that would promote the development of the substantial levels of supplies and deliverability needed to meet this growth.

Current conditions, which are anticipated to persist well into the future, necessitate that all industry stakeholders and market participants consider what can be done to increase the efficient use of our energy resources. Utility rate design policies and mechanisms affect utility planning and decision-making regarding energy efficiency. Existing policies do not align the interests of distribution utilities and their customers as there remains a strong financial detriment

to utilities when UPC declines. Many jurisdictions have implemented or are considering innovative means of addressing this undesirable outcome of historical approaches to rate design. The Department is appropriately focused on how potential changes to rate design policies could deliver additional benefits to natural gas and electric consumers in the Commonwealth of Massachusetts. Careful consideration of the many approaches for achieving these benefits is required to determine the best course of action. Not all jurisdictions, or even individual utilities within a particular jurisdiction, have adopted the same approach to tackling these challenges.

III. PUBLIC POLICY BASIS FOR DECOUPLING UTILITY REVENUES FROM UTILITY SALES

The ratemaking NOI describes the Department's objective of establishing a new base rate adjustment mechanism that aligns the financial interests of utilities with their customers by eliminating the financial disincentive for utilities to promote further deployment of demand-side resources. The specific approach outlined by the Department in the Ratemaking NOI is a form of decoupling that severs the link between a utility's base revenues from the level of customer sales. Bay State believes that there is a strong public policy foundation for adopting a ratemaking policy that favors implementation of decoupling mechanisms in Massachusetts. The changes to existing ratemaking approaches as contemplated in the Ratemaking NOI will contribute to an overall policy framework that fosters efficient and environmentally sound energy usage by consumers.

A. The Imperative to Increase the Efficient use of Energy

It is not an overstatement to suggest that there exists today a stronger imperative to develop energy efficiency and renewable resources than at any other time in our Commonwealth's history. Efficiency and renewable energy resources are a key to stabilizing

and reducing energy costs for consumers in an environment where demand growth is outpacing supply deliverability leading to higher and more volatile prices. These resources will play an increasingly important role in achieving environmental policy goals of lowering carbon emissions that pose substantial environmental risks, and relieve some of the upward pressure on natural gas commodity prices.

Utilities perform a critical part in the resource planning process as well as in influencing the energy decisions of individual customers. Realigning utility financial interests with those of Massachusetts utility customers will enable Bay State and other utilities to aggressively pursue all opportunities to achieve attainable levels of energy efficiency and conservation.

B. Revenue Decoupling Aligns Distribution and Customer Interests in Expanding Energy Efficiency Resources

The core objective of a decoupling mechanism is to break the link between energy throughput or sales on the one hand and utility revenues or earnings on the other. This can be accomplished in many different ways, including the implementation of cost-based fixed distribution rates or through an annual revenue adjustment mechanism such as that set forth by the Department as a "straw" proposal in the Ratemaking NOI. Aligning the utility's interests with increased energy efficiency through a decoupling ratemaking mechanism sets the stage for important changes in the manner in which it delivers conservation and energy efficiency opportunities to customers.

Decoupling and other similar innovative ratemaking mechanisms transform a gas distribution utility from an opponent (or at best a willing participant) in the promotion of energy efficiency into a potentially strong and effective ally. Once the financial disincentive for a utility to promote demand-side resources is removed, it is positioned to strongly advance energy efficiency and conservation initiatives for its customers. Upon implementation of a decoupled

rate design, Bay State would seek to drive down customer usage in order to increase customer satisfaction and retention, thereby improving its competitive position in the marketplace. Keep in mind the strong financial interest the Company has in retaining customers for decades into the future; the capital revenue requirements continue for upwards of fifty years under depreciation rate schedules used for ratemaking purposes. Lowering bills for customers will enhance the opportunity for the Company to continue to collect costs associated with rendering service to today's customers. Revenue decoupling unleashes the strong competitive interests of the utility to lower customer usage by removing the existing revenue impediment, which presently outweighs other factors.

Bay State and other utilities have important fiduciary responsibilities to shareholders, regulators and customers. Decoupling preserves the financial stability of a utility during times of shifting customer demands as has been the case recently. Therefore, decoupling is increasingly viewed as important for gas utilities in order to maintain the confidence of the investment community, and to attract capital to fund reliability and growth projects for the benefit of customers. Decoupling is consistent with the regulatory compact that affords a utility the reasonable opportunity to recover its costs of serving customers under its Department obligations.

Decoupling allows a utility to recover the base revenue impact of any decline in customer usage from customers; however, commodity cost reductions represent dollar-for-dollar savings in the cost of natural gas service. Therefore, while decoupling preserves a utility's financial position, customers remain, on average, substantially better off through increased conservation. This is because the gas cost component of total rates represents the largest share of costs incurred by customers.

With the benefit of decoupled revenues, Bay State would be in a position to change its Corporate culture, shifting the emphasis from promoting additional burner-tips to lowering overall consumption. It is not difficult for Bay State to envision new opportunities for it to partner more closely with customers, environmental advocates and policy makers to bring about additional benefits of reduced energy consumption. Bay State is uniquely positioned to leverage millions of contacts with customers each year to encourage customers to act upon opportunities to reduce their natural gas use. While Massachusetts already offers aggressive efficiency programs to customers compared with many other jurisdictions, customized customer communications could achieve greater reach compared with mass communications that are largely relied upon today.

When envisioning the opportunities that might exist upon decoupling a gas utility such as Bay State, the Department may want to consider an interesting case study from Oregon.

Northwest Natural Gas was among the first gas utilities to implement a decoupled rate design.

The new rate design resulted in a stronger partnership between the utility and energy efficiency stakeholders, improved program performance, shifting of resources to better promote energy efficiency, and strong public support by the utility for customers to implement efficiency resources. These results were confirmed by an independent third-party that conducted a comprehensive evaluation of the Northwest Natural Gas program.

C. There has been Broad Recognition of Public Policy Benefits of Decoupling

A number of agencies, associations and ad hoc groups have issued position papers recommending innovative changes to gas utility rate structures. These include a 2004 Joint Statement of the American Gas Association and the Natural Resources Defense Council on Energy Efficiency, National Association of Regulatory Utility Commissioners Resolutions in

2004, 2005 and 2006, and a National Action Plan for Energy Efficiency developed by a diverse group of industry participants as facilitated by the Department of Energy and the Environmental Protection Agency (the "National Action Plan"). The National Action Plan was endorsed by a broad array of industry participants including the New England Conference of Public Utilities Commissioners.

Additionally, a number of specific proposals to address the energy efficiency imperative through decoupling and other innovative rate structures have been approved in other jurisdictions. Twelve jurisdictions have approved various mechanisms for nineteen gas utilities, and two additional states have adopted general policy statements favoring decoupling. Proposals are pending in at least an additional seven jurisdictions. The vast majority of approved and pending programs were proposed since the time of Bay State's recent base rate case filing in D.T.E. 05-27, filed with the Department on April 27, 2005 in D.T.E. 05-27. While the specific approaches arrived at in these other cases reflect circumstances specific to the corresponding utilities, the extensive level of activity, demonstrates that the need to reevaluate traditional gas utility rate design is among the most important challenges addressed today.

IV. BAY STATE RESPONSE TO CHANGING INDUSTRY FUNDAMENTALS

The Department's issuance of the Ratemaking NOI in June of this year was not the genesis of Bay State's initiatives to address the need for potential changes to the ratemaking paradigm. Bay State, like many other gas distributors across the United States, experienced significant revenue losses due to decline in customer usage. However, a number of factors contributed to a somewhat unique situation for Bay State that led to a series of actions prior to the Department's ratemaking initiative in this proceeding.

A. Background on Bay State Circumstances

Bay State filed a general base rate case in 2005, after more than a decade since its previous one. In D.T.E. 05-27, the Department utilized the twelve-month historical data for calendar year 2004 as the test year to establish the initial rates under Bay State's performancebased regulation ("PBR") plan. Therefore, the historical calendar year 2004 firm throughput, adjusted for the impact of actual versus normal weather, formed the basis for establishing prices intended to recover the revenue requirement approved by the Department in that proceeding. As it turned out, the timing for establishing Bay State's rates could not have been more unfavorable to Bay State as customer usage declined measurably immediately following the test period. The decline began even prior to the Department's initial order in the proceeding in November 2005. Consumption declined by more than six percent in calendar year 2005 compared to calendar year 2004, largely due to customers response to the dramatic run-up in natural gas prices that occurred late in 2005, and Bay State's expected base revenue margins declined by a similar level. Bay State continued to experience a decline in use per customer in 2006; while not to the same degree as in the prior year. However, continued declining UPC indicates that customers will not revert back to past usage behavior, and particularly the higher usage levels experienced in 2004, demonstrating the long-term impact of high prices on consumer behavior as well as the effects of company-sponsored energy efficiency programs and other market impacts on consumption.

The rapid decline in consumption placed Bay State in the position that it stood virtually no opportunity to earn its authorized rate of return, even during the years immediately following the implementation of new rates. The dramatic decline in UPC that occurred following 2004 represented a significant departure from historic trends and could not have been predicted. Bay

State's finances were further distressed by the ramp-up of a significant non-revenue producing capital program to replace its aging steel infrastructure.

B. Bay State Response to Industry Challenges

Bay State actively sought to address its substantial revenue deficiency that occurred immediately following its recent rate case. Following the 2005-06 winter period, Bay State determined that the declining UPC that it experienced was consistent with that experienced by other gas utilities and was not expected to be a phenomenon limited to a single year. The Company petitioned the Department to allow recovery of \$5.9 million of residential revenue erosion as an exogenous adjustment in conjunction with its most recent annual PBR filing in D.T.E. 06-77. The Department rejected the Company's petition primarily on grounds that the revenue loss did not represent a cost that qualified for exogenous treatment under Bay State's tariff.

The Company then undertook an extensive internal examination of decoupling and potential approaches to implementing a revenue adjustment mechanism to address the dramatic revenue erosion that it experienced. On May 15, 2007, Bay State filed a notice with the Department of its intent to file a base rate case. The Company intended to include a decoupling mechanism as part of its rate case filing. Bay State later filed to withdraw its notice and subsequently engaged in discussions with interested parties on how best to address the revenue deficiency created primarily by the decline in customer use that occurred immediately following the 2004 time period utilized to establish its existing base rates. At the present time, Bay State's significant revenue challenges remain unresolved and the Company is considering various alternatives.

Bay State's goal throughout this period was to implement a solution that afforded it a reasonable opportunity to recover the Company's approved revenue target established in D.T.E. 05-27. Moreover, Bay State sought to reduce the regulatory burden of achieving this outcome given the fact that the Department just recently completed a comprehensive review of Bay State's rates. This goal remains today as Bay State seeks to address issues stemming from ongoing revenue deficiencies.

While Bay State's circumstances are unique, they provide an important example for the Department to consider when determining the best path to implement changes to the existing ratemaking paradigm. By virtue of the fact that Bay State recently completed a base rate proceeding, its existing Department-approved rates and tariffs reasonably represent the Company's underlying revenue requirements. The deficiency associated with Bay State's current tariff rates and charges is primarily attributable to a revenue phenomena. It is not the result of any fundamental change in costs that could not have been known or predicted at the time the Department reviewed Bay State's base rate proceeding in D.T.E. 05-27⁸. Moreover, Bay State has been successful in containing its operating costs under its existing PBR structure, demonstrating that the intended objectives of Bay State's incentive regulation plan are being achieved. However, this incentive regulation plan does not adjust rates for the substantial revenue deficiency created by the significant decline in UPC.

Bay State's situation is relevant to the Department in two important respects. First, all utilities are not similarly situated when considering whether a base rate case is a prerequisite to establishing a new ratemaking mechanism. Second, the unfavorable financial situation facing

The only exception is Bay State's substantial investment to replace aging steel infrastructure, which was reviewed in the Company's base rate case. The Department reviewed Bay State's projected steel infrastructure program in conjunction with D.T.E. 05-27, but elected not to approve the Company's proposed cost tracking mechanism in that proceeding to recover the associated costs.

Bay State will likely require action prior to the conclusion of this generic proceeding. While the Company is committed to working with the Department to consider the appropriate rate design policies that align customer and utility interests over the long term, the outcome of this generic proceeding does not obviate the need to address Bay State's own unique situation through timely consideration of any proposal presented to the Department.

V. BAY STATE COMMENTS ON SPECIFIC ELEMENTS OF STRAW PROPOSAL AND ALTERNATIVES

A. Comments on Department Straw Proposal

The Department presented a straw proposal in its Ratemaking NOI that provides a detailed framework for a decoupling mechanism. Bay State has carefully reviewed each element of the straw proposal as it relates to potential implementation for Bay State's customers. While Bay State is advocating that the Department implement a less prescribed approach when it adopts a final rule in this proceeding, the Company offers the following comments on specific elements of the straw proposal. Bay State's comments on the straw proposal follow the outline reflected in the Ratemaking NOI to facilitate the Department's review.

1. Periodic Reconciliation of Revenues

The Department envisions an annual base rate adjustment mechanism that reconciles actual revenues per customer with a pre-established baseline. The difference between actual revenues per customer and the baseline would be the basis for establishing an adjustment to base rates in a future period. The Department's straw proposal indicates that the baseline revenues per customer would be established in a base rate proceeding, and the Department states the desire to conduct new base rate proceedings prior to setting the baseline for any utility.

At the outset, Bay State notes that the primary requirement is that distribution rates are adjusted to reflect the impact of changes in UPC, both positive and negative. If the adjustment is made utilizing projected number of customers and projected sales or throughput, there will be a need for a "reconciliation" of actual recoveries to the projected levels in order to eliminate any advantage that could be achieved by projecting artificially low consumption.

On the other hand, it is possible to design a base rate adjustment that utilizes actual customers and actual sales or throughput for the most recent historic period, which is compared to the test year period sales. In this case, the base rate adjustment mechanism always lags by one year the time that the customer usage occurred. However, the one-year lag is fully consistent with the Department's historical test year approach to establishing base rates. Moreover, this approach eliminates the need for annual reconciliation, and should be considered as an alternative to that reflected in the Department's straw proposal. A process or mechanism that does not involve a reconciliation adjustment (i) greatly simplifies the administration of the mechanism, (ii) potentially eliminates any carrying costs on the under or over recoveries and (iii) avoids any potential pricing distortion by reflecting prior period under or over recoveries in a subsequent recovery period.

While Bay State agrees with the basic structure of the Department's proposal, there are many areas of detail that are important to the overall effectiveness and fairness of a decoupling mechanism, and which Bay State will address in this portion of its comments.

- 2. Determination of Allowed Revenues per Customer
 - a. Revenue per Customer Approach

Bay State strongly believes that establishing the baseline as a revenue-per-customer is the best approach for gas utilities. Under traditional rate designs, gas utility base revenues are a

function of two variables: the number of customers served and the consumption by those customers. The baseline must be consistent with the overall cost driver of the utility system. From a cost perspective, establishing the revenue baseline on a per customer basis is consistent with the primary cost driver of a gas utility, *i.e.*, the number of customers. Each new customer has a revenue requirement or cost associated with serving it. Therefore, as the total number of customers changes from year-to-year, the allowed revenues should change in a proportional manner to the primary cost driver on the gas system. This is accomplished by the use of a per customer approach to set the baseline and calculate allowable base revenues, or adjustments to the updated calendar year base revenues to align with allowable test year distribution revenues per customer, on a going forward basis. Changes in use for individual customers do not have any cost implications, and therefore the change in revenues attributable to this factor is appropriately included in the reconciliation under the new ratemaking mechanism.

Utilization of a baseline that is consistent with the primary cost driver ensures that the new ratemaking approach does not result in limiting beneficial future growth of customers served by the utility, which could occur under some alternatives. Failing to ensure that an LDC continues to have the same incentive to add new profitable loads to its system would negate many of the benefits of promoting energy efficiency, which is the intended goal of the ratemaking change. To the extent that many new customers are not added to the gas system, the environmental benefits of switching from fuels that are less environmentally friendly to natural gas would be lost.

From an administrative viewpoint, a per customer baseline is calculated in a straightforward manner and is understandable. Future comparisons of the baseline to actual experience are relatively simple as well. Bay State believes that it is important to afford utilities

with the flexibility to establish the benchmark on either a calendar or billing-cycle basis, depending on the approach that is most consistent with available data for the utility.

b. Applicable Customer Classes

Bay State believes that the base rate decoupling adjustment mechanism should be calculated and applied separately to residential heating, residential non-heating and the two Low Annual Use C&I customer classes. Other classes should be excluded from the mechanism altogether. The residential heating, residential non-heating and the two Low Annual Use C&I classes are relatively homogenous and customers within these groups generally behave in similar fashion. The range of annual gas use is relatively small or limited due to the similar end-use characteristics of residential customers and to the defined annual use parameters of the Low Annual Use C&I customers, which are by definition consumer between zero and 5,000 therms per year.

Application of the base rate decoupling adjustment mechanism to non-homogenous classes, such as medium and large C&I customers, could result in unintended and undesirable outcomes as UPC and associated base revenue per customer is influenced by many more variables than the level of energy efficiency, including the level of economic activity that the business is engaged in. Moreover, the average size of customers in these groups varies significantly. Including medium or large customers within a single benchmark may unreasonably shift risks across customers within these non-homogenous groups. A better approach to aligning utility and customer interests for larger customers is the institution of fully cost-based prices for distribution service. The cost-based prices would include both customer and demand charges and represent an appropriate method of decoupling large customer revenues from throughput. Implementation of fully cost-based rates including customer and demand

charges for the medium and large C&I customers eliminates any need for a reconciliation of allowed base revenues to actual base revenues.

c. Base Rate Case Requirement

As noted earlier in these comments, Bay State believes that the Department should consider acceptable alternatives to the requirement that each utility undergo a full rate case in order to set a baseline use. While this approach may yield a greater level of precision, it is also cumbersome and likely to delay implementation for some time. Bay State does not believe that the tradeoff of delaying benefits for customers and expending considerable resources is worth the additional precision that could be achieved through new base rate cases for all gas and electric utilities in the Commonwealth. For Bay State in particular, the Department just completed a comprehensive review of the Company's rates less than two years ago, including a full examination of cost allocation and rate design-related matters. The short time that has transpired since this review provides the Department and other stakeholders with a reasonable level of assurance that establishing a baseline from the recently completed case would be appropriate.

More importantly, mandating a base rate case for all utilities, including those under existing rate plans, is patently unfair given the investments made to achieve long-term savings under incentive mechanisms. Such an approach sends a strong and negative signal to utilities and capital markets that the ratemaking context in Massachusetts reflects an unreasonable degree of uncertainty. This outcome is entirely unnecessary and should be avoided by layering any base rate decoupling adjustment mechanism on top of existing rate structures. Incentive rate plans are primarily directed at achieving beneficial reductions in long-term utility costs rather than revenues. This is precisely why decoupling distribution revenues from

customer usage quite appropriately fits in with and complements an incentive rate plan such as that recently approved for Bay State in D.T.E. 05-27.

d. Periodic Readjustment of Baseline

Once the baseline UPC associated with the allowable base revenue is established, it should not be adjusted periodically outside of a base rate proceeding that resets the revenues recovered through rates. The baseline usage establishes a benchmark against which future consumption and associated base revenue changes are measured. The energy efficiency and conservation that is the desired outcome of this ratemaking approach contribute to usage impacts over multi-year periods. The Company's incentive to aggressively promote energy efficiency and conservation would be greatly diminished if the baseline were revised periodically, even if it were successful in adding load through new customer additions.

e. Treatment of Existing Cost Recovery Tracking Mechanisms

The Department poses the question as to whether existing ratemaking practices with respect to recovery of reconciling items such as pension and PBOP expenses should be continued or whether these items should be rolled-into the decoupling adjustment mechanism. Revenue decoupling is unrelated to the fundamental principles that existing reconciling items were separated from base rates for tracking recovery purposes. Reasons that cost items are tracked include volatility, lack of predictability or utility control, and longevity of the expense. Rolling any cost recovery item that is currently tracked into base rates through decoupling would undo the benefits for customers and utilities of the tracking mechanisms that were established.

3. Annual Reconciliation Calculation

At the outset, the Company reiterates its belief that it is possible and appropriate to establish a non-reconciling base rate decoupling adjustment mechanism consistent with the terms

of the Department's straw proposal. This alternative approach offers important benefits in terms of regulatory efficiency and simplicity, and is fully consistent with the Department's existing incentive rate and earnings sharing mechanisms applicable to base rates. These mechanisms are implemented on a prospective basis based on historical experience without any reconciliation similar to the alternative approach recommended by Bay State here.

Bay State also recognizes the benefits of the approach outlined in the straw proposal whereby actual UPC would be reconciled to the baseline on an annual basis. Bay State concurs with the general schedule outlined by the Department for this process that includes a three-month delay prior to the recovery period to allow for calculation and review of the annual calculations. Bay State would make its annual filing to be effective November 1st so that any price change that results would be implemented at the same time as other price changes, which contributes to greater overall bill stability for customers. The additional benefit of this timing is that each November through April winter period is covered within a single adjustment period smoothing out potential monthly fluctuations.

Bay State advocates the implementation of weather normalization adjustments for Massachusetts LDCs. The base rate adjustment under both Bay State's example non-reconciling mechanism and the Department's straw proposal relies on a base revenue per customer benchmark. A weather normalization adjustment could be incorporated into the new mechanism by not weather-normalizing the base revenue per customer of the current period that is compared to the benchmark.

Alternatively, the impact of weather would need to be adjusted through a separate reconciling mechanism that would be a component of the Company's annual local distribution adjustment clause ("LDAC"). Establishment of a weather adjustment mechanism in this fashion

will true-up revenues for the impact of weather in a symmetrical manner. Many of the principles and benefits of decoupling for customers and utilities are the same for weather and non-weather related changes in consumption including bill stability and overall fairness. An additional benefit of reflecting the impact of weather as a symmetrical charge or credit through the LDAC is that it eliminates the potential for the weather-normalization calculations performed in conjunction with each annual base rate decoupling adjustment filing to affect the outcome.

The reconciliation process outlined by the Department will require tracking of over and under-recoveries of amounts charged or credited through the reconciliation mechanism. Any difference between projected and actual recoveries would be included in a future adjustment period. The tracking of over and under-recoveries eliminates an area of contention and disagreement related to the projected level of sales for each recovery period.

4. Annual Adjustments to Base Rates

Once the difference between actual UPC and the baseline is calculated and the margin impact is determined, the amount to be recovered or credited to customers must be included in rates. Bay State believes that recovering this difference through an energy or throughput-based charge is appropriate given that the difference stems from changes in the recovery of revenues included in the delivery charge component of base rates. However, recovering a portion through the customer charge would be acceptable as well given the existing difference between customer charges and fully cost-based levels. Recovering a portion of the base rate decoupling adjustment amount through the customer charge offers the additional benefit of reducing the level of any decoupling adjustment in a future period.

5. Submission and Review of Reconciliation Filings

Bay State does not believe that quarterly adjustments would be necessary as a means to avoid large individual adjustments. The base revenues that are covered by the mechanism represent less than one-third of the customer's total bill so the actual bill impact of an individual adjustment is diminished. Frequent price adjustments are not necessarily preferred by the customer. An alternative method of addressing the potential concern of reducing the potential for a large annual adjustment could be the establishment of a percentage cap on the annual adjustment.

6. Accounting for Risk in Setting the Allowed Revenues

Bay State has been exposed to substantial increases in revenue erosion created by declining UPC. Implementation of a revenue decoupling mechanism addresses the incremental risks that the Company has experienced, particularly over the last couple of years. Bay State believes that implementation of decoupling does not warrant any adjustment to the accounting for risk setting in the Department's allowed return for the Company. To the contrary, Bay State believes that the increase in risk warrants an upward adjustment to Bay State's allowed return if revenue decoupling is not implemented.

In an effort to provide the Department with a comprehensive and unified comments on the issues related to setting of risk, Bay State has joined with other utilities to request that an independent expert provide comments on this important issue. In particular, Bay State is joining with Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"), New England Gas Company, NSTAR Electric Company, NSTAR Gas Company, and Western Massachusetts Electric Company in sponsoring the comments of Mr. John J. Reed regarding whether any

adjustment to the approved level of return on equity is appropriate with the implementation of decoupling.

7. Shared Earnings Provision

The majority of incentive rate plans incorporate shared-earnings provisions to account for potential differences between expected and actual productivity benefits that are achieved under incentive regulation. Bay State recommends that a single earnings sharing provision be applicable to each utility and that the mechanism be applied through the PBR plan if one exists. The specific level of the earnings-sharing band and sharing levels should be established separately for each utility.

8. Performance Based Regulation

The Department has proposed to eliminate existing PBR plans with the implementation of decoupling. Bay State believes that this aspect of the Department's proposal is unwarranted and would be unfair to Bay State and likely to other utilities operating under existing PBR plans. Elimination of existing PBRs is unwarranted because the plans focus on utility costs rather than revenues and decoupling is not a substitute for the benefits of the application of incentive regulation to utility cost management. Elimination of existing PBRs in mid-stream is unfair because of the investments that Bay State and other utilities have made based entirely under the presumption that the existing plans would continue.

The Department's use of PBRs has achieved important benefits in terms of efficient management of Massachusetts utilities and improvements in service quality. Given that the purpose of PBRs and decoupling are complementary rather than either overlapping or being in opposition to one another, Bay State strongly urges the Department to change this aspect of its

straw proposal. The Company believes that continuation of PBR over the short and long-term will best serve customers and maintain an efficient regulatory process.

In an effort to provide the Department with a comprehensive and unified comments on the issues related to setting of risk, Bay State has joined with other utilities to request that an independent expert provide comments on this important issue. In particular, Bay State is joining with The Berkshire Gas Company, Fitchburg Gas and Electric Light Company d/b/a Unitil, New England Gas Company, NSTAR Electric Company, NSTAR Gas Company and Western Massachusetts Electric Company in sponsoring the comments of Dr. Laurence R. Kaufmann that address the implications of eliminating existing long-term rate plans

9. Lost Base Revenue

The Department's existing treatment of recovery of lost base revenues attributable to the existing energy efficiency programs for residential and small C&I customer classes should be terminated with the implementation of decoupling. Lost base revenues will be subsumed within the calculation of the decoupling mechanism for those customer classes covered by the new base rate adjustment mechanism and will no longer need to be tracked separately. Any lost base revenues attributable to time periods prior to the implementation of decoupling would still need to be recovered from customers. In addition, any lost base revenues associated with medium and large C&I customer classes that are not covered by the new base rate adjustment mechanism under Bay State's recommended approach would continue to be recovered under the existing mechanism.

10. Implementation Schedule

Bay State supports the Department's initiative to address the existing disincentive for utilities to promote energy efficiency and conservation by customers. Based in part on its own

experiences, the Company recommends that the Department carefully consider the best regulatory process and ratemaking practices to achieve its goals. While the Department has suggested that new base rate proceedings would be conducted in order to implement decoupling, such an approach would consume considerable resources and potentially delay and diminish the overall benefits for customers. The Department and other jurisdictions have adopted significant changes in their approach to establishing just and reasonable rates for customers at other times in the past. In many of these cases, regulators establish modified policies that can be implemented either through a subsequent base rate case or as part of a stand-alone filing. For instance, the Department established a policy favoring incentive ratemaking in D.P.U. 94-158. Although the changes to the Department's ratemaking approach were significant, the Department did not mandate a new rate case for each utility, nor did it mandate the same incentive mechanism for all utilities. Bay State believes that there are valuable lessons from the Department's prior experience. The desire to act expeditiously should be accompanied by alternative avenues to base rate cases as a means of allowing for initial implementation.

Decoupling has been implemented in twelve jurisdictions and in some cases for more than one utility. In approximately one-half of the cases, decoupling implementation occurred independent of a base rate proceeding. The initial implementation of decoupling outside of a base rate proceeding is acceptable, particularly if a utility has had a recent base rate case reviewed by the Department. There have been no jurisdictions that have implemented decoupling that have also mandated rate case filings by all utilities. Only the New York Public Service Commission has issued a decoupling requirement for all gas and electric utilities, and its new policy is to be addressed by utilities through ongoing or upcoming base rate cases, but without a filing mandate.

Bay State recommends that the Department consider alternative means of initially establishing a decoupling mechanism for an individual utility. For instance, a utility could implement the new ratemaking framework by linking back to the billing determinants from the prior rate case to establish the baseline or by demonstrating that the change in rates and rate design is revenue-neutral. In addition, the Department should be open to one or more utilities conducting decoupling pilot programs for a specified duration. Typically, pilots can be implemented more rapidly and provide the additional benefit of structured learning opportunities for policy makers, utilities and other interested stakeholders.

There may be some instances where the Department may require a utility to file a base rate case prior to implementing decoupling. An example could be if it has been five or more years since the utility has filed a base rate case. Another approach to consider if the Department is going to require all utilities to implement decoupling on a similar timeframe, it could require each to file a base rate case within the first five-to-seven years of the program. These are more flexible means of ensuring that the Department has an opportunity to perform a full review of each utility's costs and revenues without creating a situation where all of the reviews occur within a limited span of time. The Department should also be mindful of the protections afforded under earnings-sharing type mechanisms that it proposes to implement along the new base rate adjustment mechanisms.

B. The Department Should Allow Flexible Program Design

The Ratemaking NOI contemplates the establishment of a single form of decoupling for all gas and electric utilities in Massachusetts. Bay State recommends that the Department provide for design flexibility across utilities. There will be greater potential gains in efficiency and deployment of new technologies if the Department allows some tailoring of a basic approach

to each utility. The primary focus of the Department in this proceeding should be the establishment of ratemaking policy guidelines rather than a mandated "cookie-cutter", one-size-fits-all ratemaking mechanism. The Department and other stakeholders should also anticipate that there will need to be adjustments to the new ratemaking mechanisms after they have been implemented. Testing variations of innovative approaches over a range of market conditions will provide the greatest degree of understanding of the best approaches for the long-term.

To the extent that the Department establishes a preferred decoupling approach with a similar level of detail as reflected in its straw proposal, utilities and other parties should be allowed to propose changes applicable to individual utilities. The Department should accept recommended changes so long as the alternative is expected to achieve the same level of benefits as the Department's primary model. Even the California Public Utilities Commission ("CPUC"), with multiple years of decoupling experience, has approved different approaches for different utilities. Moreover, the CPUC has periodically approved changes to the plans of specific utilities. While the Department may envision administrative and other benefits associated with uniformity, Bay State believes that flexible design is a critical component of maximizing the overall benefits for customers. Any significant change in ratemaking practices must be tailored to the specific circumstances for each utility in order to gain the greatest benefit.

C. Example Base Rate Adjustment Mechanism

Bay State, through careful study of the Department's ratemaking objectives, straw proposal and independent analysis of decoupling alternatives, constructed an illustrative rate adjustment mechanism that accomplishes the Department's goals. Given the importance of retaining the existing incentive-based rate plans, Bay State's example layers the decoupling base rate adjustment onto its existing annual PBR filing template to illustrate the ease with which the

adjustment can be applied along with the revenue target adjustment for PBR purposes.

Benchmarking to base revenue per customer for certain homogeneous classes can most effectively be performed within Bay State's PBR plan annual base rate adjustment mechanism.

Note that Bay State has the homogeneous classes of Residential Non-heating, Residential Heating and the two Low Annual Use C&I classes.

First, the annual revenue target is established based on current calendar year billing determinants at current rates and adjusted by the PBR rate cap percentage. Then, based on these PBR-adjusted revenues by class for the homogeneous classes, *i.e.*, residential non-heating, residential heating, and the Low Annual Use C&I customer classes, the base revenue per customer is determined both per the number of customers for the benchmark (or test year) and current annual year. The difference in base revenue per customer is then used to derive the rate adjustment to the throughput charge. Since Bay State's base rates for the homogeneous classes are both flat and annualized, no allocation of the revenue adjustment to block or seasonal rate components is needed to derive the rate adjustment by throughput or volumetric base rate components. Changes in use for individual customers do not have any cost implications, and therefore the change in revenues attributable to this factor is appropriately included in the setting of base rates each year, effective every November 1, within Bay State's PBR base rate adjustment mechanism.

This straightforward annual base rate setting reflecting an adjustment in the annual base revenue target to realign with the test year or benchmark base revenue per customer is shown in Attachment BSG-1. This schedule shows that current base rates established per D.T.E. 05-27 are adjusted first by the PBR rate cap, and the resulting annual base revenues are derived by applying these adjusted rates to weather normalized 2005 billing determinants. Next, the

resulting PBR-adjusted base revenues are adjusted for the change in average base revenue per customer from the 2004 test year period to 2005. Incorporating this base revenue per customer adjustment in setting the distribution revenue target from which base rates are set, affords a streamlined approach at the time base rates are being set at the PBR base rate adjustment scheduled time, effective every November 1. Further, because such an adjustment is made once a year to base rates, no annual reconciliation is needed. The base rates each year will be set at weather normalized base revenues, reflecting the test year average base revenue per customer.

D. Full Cost-Based Distribution Rate Alternative

Bay State recommends that the Department recognize that there are multiple methods of achieving the primary objective of the removing the disincentive for utilities to aggressively promote energy efficiency and conservation measures. Among these are the implementation of fully cost-based rates for the distribution component of customer bills.

Under fully cost-based rates, all of an LDC's fixed costs are recovered through fixed base rate charges. This can be accomplished through a fixed monthly charge similar to that employed in the cable industry or through a combination of fixed monthly and fixed demand charges. As a result, variations in UPC do not result in changes in base revenues and a decline in UPC is not detrimental to the LDC's financial condition.

The benefits of this approach are that it achieves all of the benefits of the base rate adjustment mechanism reflected in the straw proposal; however, the overall administration is much easier. In addition, all of the rate elements are fully aligned with costs promoting economic efficiency and fairness. The Department has noted in the Ratemaking NOI that collection of costs through throughput-based charges results in greater incentives for customers to conserve. However, the application of fully-cost based rates with significant fixed charges

does not materially diminish an individual customer's incentive to conserve as nearly 75% of the total costs of service represented by CGAC and LDAC costs would still be recovered on a throughput basis.

While Bay State believes that fully cost-based rates are preferable to decoupling, it is not advocating the Department adopt this form of rate design for all utilities. Rather, the Company recommends that the Department allow each utility to propose an alternative method of decoupling base revenues as part of the compliance phase that follows the Department's issuance of new ratemaking policies. Any utility proposing the implementation of fully-cost-based rates would need to demonstrate that the benefits of the approach meet or exceed the Department's ratemaking policies and objectives. Further, any proposal to implement fully cost-based rates would need to determine whether a phase-in is required to mitigate potential bill impacts on customers. Bay State's analysis indicates that very little phase-in would be required to realign its rates with costs in this manner.

VI. CONCLUSION

Bay State believes that the Department is undertaking an important initiative in this proceeding that presents the opportunity to align the interests of customers and gas and electric utilities by severing the existing link between utility earnings and the energy consumption of customers. With the implementation of additional efficiency resources and promotion of new technologies, future energy consumption in Massachusetts will be reduced while maintaining current levels of comfort and customer benefits from their gas and electric use. Reductions in future energy consumption benefit customers by reducing their outlays for basic services, benefit the environment through lower emissions and reduced use of natural resources, and benefit the Commonwealth by increasing its economic competitiveness.

A change to the existing ratemaking paradigm as contemplated by the Department is necessary to remove the disincentive for Bay State and other Massachusetts utilities to advocate for the additional deployment of these resources. Bay State is eager to implement these changes and bring additional benefits to its customers. With the implementation of a rate design that does not penalize the Company for reductions in customer use, Bay State would seek to aggressively drive down customer usage, thereby increasing the value of the service it provides and its customer satisfaction. At the same time, Bay State cautions the Department to focus the ratemaking changes on issues germane to customer consumption of energy, leaving intact other ratemaking practices such as PBR that are working well. The Company also recommends that the Department work toward the establishment of new rules that allow flexibility to tailor specific approaches to the circumstances of each utility in a manner that is consistent with the Department's goals for the new base rate adjustment mechanisms.

Bay State requests the Department to consider the merits of its comments on the new ratemaking approach under consideration. Due to its experience with significant declining UPC over the last two years, Bay State has spent considerable time and effort over the last year working toward the implementation of a ratemaking mechanism similar to that advocated by the Department in the Ratemaking NOI. These prior efforts have influenced Bay State's understanding of the issues before the Department as reflected in these comments. The Company looks forward to additional opportunities in this proceeding to work with the Department and other interested parties to craft new policies that maximize the benefits that are achievable.

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	Adjusted Proposed Rates	(17) (16 + 8)	10.31 0.2822 0.2822	6.19 0.1738 0.1738	10.31 0.2983 0.2983	5.88 0.1722 0.1722	2.24 (0.0000) (0.0000)	16.50 0.3150 0.3150	16.50 0.2566 0.2566
	L	•	888	999	8 8 8	ø ↔ ↔	999	888	<i>↔ ↔</i>
	Volumetric Rate Adjustment	(16) (15/4 vols)	0.0101	0.0100	0.0204	0.0138	\$ (0.0000)	0.0214	(0.0198)
	Base Rev	(15) (14 - 9)	\$ 22,303 \$	4,795 \$	4,294,385 \$	264,477 \$	(0)	\$ 681,189	\$ (17,046) \$ \$ 5,013,104
	¬ `	•	€9	€9	↔	₩	₩	€9	
	Allowed Base Revenues	(11/1 cust*12) (13 * 4 cust / 12)	5,510,446	219,211	87,943,006	4,547,102	264	10,850,701	2,204,210
		. 5	69	69	69	69	69	69	€9
at Nov. 1 2006 Bates	2004 Base Rev per Customer	(13) 11/1 cust*12	\$ 174.66	\$ 120.00	\$ 432.22	\$ 256.43	\$ 26.85	\$ 641.66	\$ 633.83
20	3								
N ACM	2005 Base Rev	(12) (9/4 cust*12)	\$ 172.84	\$ 117.38	\$ 411.12	\$ 241.52	\$ 26.85	\$ 611.55	\$ 667.49
	. 4 t		487 894 778 159	23,855 45,974 30,313	115 809 472 395	379 315 768 463	322	399 397 622 418	570 868 920
	Base Rev. Using 2004 Determinants	(11)	\$ 3,924,487 \$ 941,894 \$ 671,778 \$ 5,538,159	\$ 123,855 \$ 45,974 \$ 30,313 \$ 200,141	\$ 25,272,115 \$ 51,401,809 \$ 11,581,472 \$ 88,255,395	\$ 1,271,379 \$ 2,689,315 \$ 659,768 \$ 4,620,463	• • • •	\$ 3,303,399 \$ 6,605,397 \$ 796,622 \$ 10,705,418	\$ 658,482 \$ 859,570 \$ 589,868 \$ 2,107,920
_	o + o		3.14% 1.37% 1.37% 2.63%	3.14% 1.76% 1.76% 2.63%	3.14% 2.41% 2.41% 2.63%	3.14% 2.42% 2.42% 2.63%	2.63%	3.14% 2.39% 2.39% 2.63%	3.14% 2.42% 2.42% 2.63%
	Revenue Percent Increase	(10)			લંતેતે તે	લંગે ગેગે	8 8	ଜ ରିଭିରି	લંતેતે તે
	8 8	<u>(6</u>	3,904,849 945,470 602,824 5,453,143	135,656 55,566 23,194 214,416	,662 3,346 ,613	1,250,976 2,410,450 621,199 4,282,625	264	3,348,717 6,063,514 929,281 0,341,512	688,662 1,040,370 592,224 2,321,256
	Revenues Proposed	(9) (6*(1+col 10))	3,904 945 602 5,453	135 23 214	25,182,662 47,208,346 11,257,613 83,648,621	1,250 2,410 621 4,282		3,348,717 6,063,514 929,281 10,341,512	688 1,040 592 2,321
	P. Re	(6*(1	\$ \$ \$ \$	& & & &	8 8 8 8	6 6 6 6 6 F	မှ မှ မှ	8 8 8 8	& & & & &
	7			1 11	10.31 0.2779 0.2779	1 11	22.24	16.50 0.2936 0.2936	16.50 0.2764 0.2764
	Proposed Rates	(8) (9/4)	10.31 0.2721 0.2721	6.19 0.1638 0.1638	0.27	5.88 0.1584 0.1584	. 2	16 0.29 0.29	16 0.27 0.27
904			\$ \$ \$	9 9 9 0	& & &	& & & ⊗	φ φ	\$ \$ \$	<i>↔ ↔</i>
2005 vs. 2	Revenue Increase @ 2.63%	(2)	5,453,080	214,419	83,649,697	4,282,672	264	10,341,512	2,321,256
ner -	=	≦	↔	€	ω	θ.	€	ω	€
ustor	e	en (3,785,970 932,692 594,677 5,313,339	131,526 54,605 22,793 208,924	24,416,000 46,097,398 10,992,689 81,506,087	1,212,892 2,353,512 606,521 4,172,924	257	3,246,768 5,922,142 907,590 10,076,500	667,696 1,015,844 578,231 2,261,771
sign per C	Revenue	(6) (4*5)	3,78 93 56 5,31	13	24,41 46,09 10,99	1,21 2,35 60 67,17		3,24 5,92 90 10,07	1,01 57 5,26
re De	œ	œ	↔ ↔ ↔	↔ ↔ ↔	• • • • •	6 6 6 6	6 6 6	6 6 6 6	φ φ φ φ
PBK Increase Calculation & Rate Design Including Revenue Adjustment Associated with Base Revene per Customer – 2005 vs. 2004	Base Rate	(2)	10.00 0.2684 0.2684	6.00 0.1610 0.1610	10.00 0.2714 0.2714	5.70 0.1547 0.1547	2.18	16.00 0.2868 0.2868	16.00 0.2699 0.2699
ted	s		5 8 8 8 5 8 8 8	5 12 33 3 \$ \$ \$	2 <u>2 2 3 5</u>	8 2 2 3 8	118 \$ 110 078 \$ 188	8 8 9 Q Q	2 0 0 0 8 8 8
socia	2005 Adjusted ter. Therm	(4)	378,597 3,475,008 2,215,638 5,690,646	21,921 339,163 141,572 480,735	2,441,600 169,850,399 40,503,643 210,354,042	212,788 15,213,391 3,920,627 19,134,018	118 1,110 1,078 2,188	202,923 20,649,030 3,164,540 23,813,570	41,731 3,763,780 2,142,390 5,906,170
ant As	2005 Adjusted Deter. Therms	2.2	8, 6, 6, 6,	0 t 4	2,4 169,8 40,5 210,3	3,91		23,4	2,7
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enue Adju	Weather Adjusted Therms	(3)			(11,524,735) (3,458,929) (14,983,664)	(1,020,245) (545,341) (1,565,586)		(1,426,340) (483,370) (1,909,710)	
g Re									
ludin	5 Jeter. ns		378,597 3,475,008 2,215,638 5,690,646	21,921 339,163 141,572 480,735	2,441,600 181,375,134 43,962,572 225,337,706	212,788 16,233,636 4,465,968 20,699,604	118 1,110 1,078 2,188	202,923 22,075,370 3,647,910 25,723,280	41,731 3,763,780 2,142,390 5,906,170
<u>n</u>	2005 Actual Deter. Therms	(2)	37 3,47 2,21 5,69	33 34 48	2,44 181,37 43,96 25,33	21 16,23 4,46 20,69		20,22,07 3,64 25,72	3,76 2,14 5,90
					- 10				
	2004 Normalized Deter. Therms		380,501 3,461,572 2,468,865 5,930,437	20,014 280,669 185,060 465,729	2,450,273 184,965,126 41,674,961 226,640,087	216,221 16,977,998 4,165,204 21,143,202	144 1,395 1,333 2,728	200,206 22,497,947 2,713,289 25,211,236	39,908 3,109,876 2,134,110 5,243,986
	2004 Normalized eter. Therm	£	38 3,46 2,46 5,93	28 18 46	2,450,273 (84,965,126 41,674,961 (26,640,087	21 16,97 4,16 21,14			3,10 2,13 5,24
	Nc Dete		g	g	+ 19			Winter	Vinter
	<u>•</u>		Heatir arge s imes	Heatir arge s ımes	ng arge s imes	Heatir arge s imes	arge s imes	High \ arge s mes	Low V arge s imes
	hedu		Non-l er Ch Slume k Volu	Non-l er Ch Slume k Volu	Heati er Ch Jume k Volu	Non-l er Ch olume k Volu	t Volu	er Chi olumei k Volu	er Cha
	Rate Schedule		R&T 1 Residential Non-Heating Customer Charge Peak Volumes Off-Peak Volumes Total	R&T 2 Residential Non-Heating Customer Charge Peak Volumes Off-Peak Volumes	R&T 3 Residential Heating Customer Charge Peak Volumes Off-Peak Volumes Total	R&T 4 Residential Non-Heating Customer Charge Peak Volumes Off-Peak Volumes	Outdoor Light Rate L Customer Charge Peak Volumes Off-Peak Volumes Total	G & T 40 C&I Low Annual/High Winter Customer Charge Peak Volumes Off-Peak Volumes Total	G & T50 C&I Low Annual/Low Winter Customer Charge Peak Volumes Of-Peak Volumes
	ů.		R&T 1 Reside Cus Pea Off-	R&T 2 Reside Cus Pec Off	R&T 3 Resider Cus Pea Off-I	R&T 4 Resider Cus Pea Off-	Outd.	G & T 40 C&I Low Custo Peak Off-Pe	G & T 50 C&I Low. Custo Peak Off-Pe
	Line No.				2 2 4 5 9 7 8 6			33 33 33 34 35 35 36 36 36 36 36 36 36 36 36 36 36 36 36	

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	Adjusted Proposed	(17) (16 + 8)	67.04 0.1625 0.1030	67.04 0.1525 0.0709	219.69 0.1521 0.0660	219.69 0.1414 0.0552	805.52 0.0427 0.0164 1.8197 0.5623	805.52 0.0429 0.0164 1.8254 0.5640	0.42	
			\$ \$ \$	ө ө ө	49 49 49	49 49 49	\$ \$ \$ \$ \$ \$ \$	69 69 69 69	€	
	Volumetric Rate	(15/4 vols)	82	92	S	S	8	s,	ner	1 11
	Base Rev		ogeneous Clas	ogeneous Clas	ogeneous Clas	ogeneous Clas	ogeneous Clas	ogeneous Clas	Contract Custor	\$ 5,013,104
	Allowed Base	(13) (14) (17) (17) (17) (17) (17) (17) (17) (17	N/A Non-homogeneous Class	N/A Non-homogeneous Class	N/A Non-homogeneous Class	N/A Non-homogeneous Class	N/A Non-homogeneous Class	WA Non-homogeneous Class	NA Special Contract Customer	
006 Rates	2004 Base Rev	(11/1 cust*12)	\$ 2,586.81	\$ 2,259.28	\$ 12,456.46	\$ 13,395.38	21,906.06 \$ 77,707.32	\$ 82,537,48	\$ 50,494	
at Nov. 1, 2006 Rates	2005 Base Rev	(12) (9/4 cust*12)	\$ 2,487.29	\$ 2,302.39	\$ 9,492.64	\$ 10,503.56	\$ 21,906.08	\$ 68,706.89	\$ 50,494	
	Base Rev. Using 2004	(11) (8 * 1)	\$ 3,767,313 \$ 7,559,498 \$ 7,86,982 \$ 12,113,793	\$ 1,412,734 \$ 1,942,988 \$ 611,759 \$ 3,967,481	\$ 1,632,736 \$ 5,598,250 \$ 483,716 \$ 7,714,702	\$ 656,653 \$ 2,086,587 \$ 593,325 \$ 3,336,566	\$ 145,799 \$ 307,918 \$ 37,012 \$ 623,295 \$ 58,061 \$ 1,172,085	\$ 643,610 \$ 1,229,340 \$ 419,287 \$ 2,535,143 \$ 668,240 \$ 5,495,620	\$ 50,494	\$ 145,278,559
ne per Customer 2005 vs. 2004	Revenue	(10)	3.14% 2.39% 2.39% 2.63%	3.14% 2.36% 2.36% 2.56%	3.14% 2.44% 2.44% 2.63%	3.14% 2.46% 2.46% 2.63%	3.14% 2.23% 2.23% 2.23% 2.23%	3.14% 2.55% 2.55% 2.55% 2.55% 2.55%	2.63%	2.63%
	Revenues	(9) (6*(1+col 10))	\$ 3,571,274 \$ 6,769,141 \$ 701,090 \$ 11,041,505	\$ 1,595,241 \$ 2,314,758 \$ 655,457 \$ 4,565,456	\$ 1,979,391 \$ 4,743,720 \$ 404,280 \$ 7,127,391	\$ 1,023,967 \$ 2,439,578 \$ 616,211 \$ 4,079,756	\$ 612,198 \$ 226,882 18,389 \$ 481,537 \$ 48,379 \$ 1,387,385	\$ 782,969 \$ 1,257,551 \$ 370,245 \$ 2,499,996 \$ 654,497 \$ 5,565,258	\$ 50,494 \$ 50,494	3,586,673
	Proposed Rates		67.04 0.1625 0.1030	67.04 0.1525 0.0709	219.69 0.1521 0.0660	219.69 0.1414 0.0552	805.52 0.0427 0.0164 1.8197 0.5623	805.52 0.0429 0.0164 1.8254 0.5640	0.42	FY FY
	Revenue Increase @	(7)	\$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 50,494 \$	\$ 140,082,160 \$ 3,589,750
	Sinor	(6) (4*5)	\$ 3,462,550 \$ 6,613,229 \$ 684,725 \$ 10,760,504 \$	\$ 1,546,675 \$ 2,261,442 \$ 640,344 \$ 4,448,461	\$ 1,919,130 \$ 4,630,964 \$ 394,651 \$ 6,944,745	\$ 992,793 \$ 2,381,005 \$ 601,416 \$ 3,975,214 §	\$ 593,560 \$ 221,933 17,988 \$ 471,033 \$ 47,321 \$ 1,351,834	\$ 759,132 \$ 1,226,281 \$ 361,038 \$ 2,437,947 \$ 638,250 \$ 5,422,648	\$ 49,200 \$	\$ 136,492,409
with Base Reve	Base	(5)	\$ 65.00 \$ \$ 0.1588 \$ \$ 0.1006	\$ 65.00 \$ \$ 0.1490 \$ \$ 0.0693 \$	\$ 213.00 \$ \$ 0.1485 \$ \$	\$ 213.00 \$ 0.1380 \$ 0.0539	\$ 781.00 \$ 0.0418 \$ 0.0160 \$ 1.78 \$	\$ 781.00 \$ 0.0418 \$ 0.0160 \$ 1.78 \$ 0.5500	φ φ	17711
Including Revenue Adjustment Associated with Base Revene per Customer – 2005 vs. 2004	2005 Adjusted	(4) (2+3)	,430 430	23,795 15,177,460 9,240,180 24,417,640	9,010 31,184,940 6,128,120 37,313,060	4,661 17,253,660 11,158,000 28,411,660	760 5,309,400 1,124,240 264,625 86,038 6,433,640	972 29,336,860 22,564,900 1,369,633 1,160,455 51,901,760	235,218	924,856,336
	Weather Adjusted	(3)	(2,867,480) (939,970) (3,807,450)		(2,269,730) (768,880) (3,038,610)		(338,020) (114,240) (452,260)			(51,514,560)
	2005 Actual Deter.	(2)	53,270 44,512,500 7,746,380 52,258,880	23,795 15,177,460 9,240,180 24,417,640	9,010 33,454,670 6,897,000 40,351,670	4,661 17,253,660 11,158,000 28,411,660	760 5,647,420 1,238,480 264,625 86,038 6,885,900	972 29,336,860 22,564,900 1,369,633 1,160,455 51,901,760	235,218	976,370,896
	2004 Normalized	(1)	56,195 46,519,987 7,640,605 54,160,592	21,073 12,740,904 8,628,479 21,369,383	7,432 36,806,379 7,329,027 44,135,406	2,989 14,756,628 10,748,640 25,505,268	ligh Winter 181 7,211,204 2,256,827 342,526 103,257 9,468,031	28,655,953 26,566,274 1,388,815 1,184,822 54,222,227	235,218 235,218	f all total lines) =
	oli bodos		G & T 41 Cel Med Annual/High Winter Customer Charge Peak Volumes Off-Peak Volumes Total	G & T51 C&I Med Annual/Low Winter Customer Charge Peak Volumes Off-Peak Volumes Total	G & T 42 C&I High Annual/High Winter Customer Charge Peak Volumes Off-Peak Volumes Total	G & T 52 C&I High Annual/Low Winter Customer Charge Peak Volumes Off-Peak Volumes Total	G & T 43 C&LExta High Annual/High Winter Customer Charge Peak Volumes 7.211 Off-Peak Volumes 344 Off-Peak Demand 344 Total	G & T53 CAL Extra High Annual/Low Winter Customer Charge Peak Volumes 25.56 Off-Peak Volumes 1.38 Off-Peak Demand 1.38 Off-Peak Demand 1.88 Total	Special Contracts Customer Charge All therms Total	Total All (Line 46 is the sum of all total lines) Total Increase to revenue
	Line	Ö	47 G 48 C 50 51 51 52	- 2 & 4 & 0 t					왕 6 1 4 4 4 의	